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AN ASSESSMENT OF CHINA'S VIEW ON THE REVOLUTION IN MILITARY AFFAIRS AND FUTURE WARFARE

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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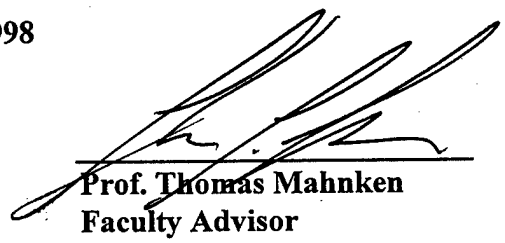

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15.Abstract: China's explosive economy has financed her recent modernization program. Not only is China modernizing her armed forces but many of her senior military authors are advocating a RMA and expounding on its potential value to future warfare. Due to China's existing technology gap, there are skeptics in the United States who doubt that she will be able to keep pace with the American conception of RMA. However, the Chinese view of RMA may be completely different from the Western view. With a regional strategic and operational focus and employing the fruits of RMA, the Chinese may be able to develop highly complex, asymmetrical capabilities and operational techniques that deny area access to a U.S. military force, thus limiting American ability to influence the situation. The results of this analysis suggest that even though China will be unable to completely technically with America for a least a decade and maybe longer, nevertheless, the U.S. needs to develop plans, concepts, and countermeasures to defeat future Chinese asymmetrical warfare that is based on rapid advances in technology.

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AN ASSESSMENT OF CHINA'S VIEW ON THE REVOLUTION IN MILITARY AFFAIRS AND FUTURE WARFARE

INTRODUCTION

China has experienced phenomenal economic growth during the past ten years.[1] This prosperous turn of events is predicted to continue well into the next decade. To maintain this pace of economic development, so vital to its future and security concerns, China requires an ever increasing need for raw resources, like oil, that it must import.[2] China has sensed this security dilemma, especially as it perceives the United States as being its future major threat,[3] and has taken advantage of the economic upswing to modernize significantly its military capabilities with both foreign and indigenous arms.[4]

Even though current Chinese weaponry, tactics, and doctrine are estimated to be on the average 15-20 years behind the West,[5] the imperative question for the United States, and in particular the Commander in Chief, U.S. Pacific Command, remains whether China will be able to compete in the Revolution in Military Affairs (RMA).

Due to China's existing technology gap, there are skeptics in the United States who doubt that she will be able to keep pace with the American conception of RMA. However, the Chinese are quite confident that they and not the United States will be the first to exploit RMA in the next two or three decades.[6] With a regional strategic and operational focus and employing the fruits of RMA, the Chinese may be able to develop highly complex, asymmetric capabilities and operational techniques that deny area access to a U.S. military force, thus limiting American ability to influence the situation. This paper will analyze known Chinese viewpoints on RMA, ideas of future warfare and recent modernization programs. The results of this analysis will suggest that even though China will be unable to compete technically with America for at least a

decade and maybe longer, nevertheless, USCINCPAC needs to develop offensive plans, concepts, and countermeasures to defeat future Chinese asymmetric warfare that is based on rapid advances in technology.

CHINESE DOCTRINAL METAMORPHOUS AND ITS EFFECT ON RMA DEVELOPMENT

There are at least three contending schools of future Chinese warfare.[7] Mao Zedong's "People's War" was the basis of Chinese military doctrine for over 50 years and still has some adherents today. This doctrine advocates using China's greatest asset, its people, in a protracted war of attrition to defeat the enemy. Drawing the enemy deep into its territory, this concept envisions using guerrilla tactics to harass and weaken the enemy.[8] As the military-industrial base mobilizes, China would then arm millions of militia with overwhelming conventional, but not necessarily modern weapons, to defeat the enemy with its main army. This defense strategy is considered outdated by many military professionals and is less frequently, than in the past, discussed in Chinese military journals today.[9]

The second contending school of thought is identified as the "Local War Under Modern Conditions" or simply "Local War." This doctrine has shifted away from the expectation of a massive apocalyptic war involving the superpowers and has concentrated on preparing for local and regional conflicts.[10] A scenario of a future Local War would visualize a low-intensity border conflict with a regional competitor in which China would seek a quick military decision.[11] Therefore, a Local War strategy requires an "active defense under new historical conditions" to defend China's territorial integrity and long-term threats against national security.[12]

A Local War strategy advocates protecting China's littoral economic, financial, and strategic centers—the key logistical ability to sustain prolonged warfare—by extended strategic depth.[13] Moreover, this strategy recognizes that the Maoist nature of warfare and its means have changed from conventional to high-tech weaponry. This school of thought advocates employing joint, flexible, and various combat forms throughout the ground, air, space, and sea dimension to achieve military goals.[14] Many foreign scholars have stated that Local War is the most likely operational and strategic doctrine of China; however, there is considerable debate whether this is, in fact, true since China has never declared publicly an official national strategy.[15]

The third major contending school of military thought is that of the RMA advocates. This relatively new philosophy is an outgrowth of the Persian Gulf War. Advocates of the Local War school were impressed with the U.S.-led performance and employment of high-technology weapons. It was clear to the Chinese that a future symmetric military confrontation with the United States would invite disaster.[16]

A Chinese RMA scenario envisions a conflict with the United States, Russia or Japan. The opponent would have advanced weaponry, satellites for communications and reconnaissance, stealth aircraft, nuclear weapons, and nanotechnology. To defeat such a threat would require China to attack the enemy preemptively and employ such weaponry as directed energy platforms, computer viruses, and robots.[17]

Some advocates of RMA warfare urge that China should develop three new mission areas for future contingencies: a strategic reconnaissance and warning system, a battlefield information network for service-wide coordination, and a long-range precision strike system that includes tactical guided missiles.[18] Chinese scientists also see space warfare, consisting of an anti-satellite and ballistic missile defense capability, as being a critical determinant to the

outcome of any future war. RMA supporters anticipate a China in the mid-21st century as having nuclear parity with Russia and the U.S.[19] Finally, the aims of the Chinese are principally to disrupt or paralyze, rather than destroy an opponent,[20] thus repelling or denying area access during a regional conflict. RMA advocates see mobile, rapidly deployable amphibious, special warfare, and airborne forces adding shock value and penetration in depth and width to nonlinear military operations to accomplish this objective.[21]

Although RMA is a relatively new concept within the People's Liberation Army (PLA), doctrinal articles on it and future warfare in general are gaining popularity within the Chinese military establishment. Furthermore, RMA and future warfare advocacy gained considerable credence when, according to official media announcements, a national conference to discuss the implications of a potential RMA were held in October 1995.[22]

Even though the Chinese are very secretive about future doctrines and programs, the aforementioned articles and conferences on RMA imply that they are developing military doctrine that, while similar in some respects to Joint Vision 2010, is more accurately designed to take advantage of Chinese strengths to gain leverage against enemy weaknesses. This assessment follows that the Chinese view of RMA may be completely different from the Western view. Therefore, China's limited technical capabilities and her perceived strategic imperatives may result in a hybrid RMA based on indigenous research and development, combined with imported combat systems and sensors, and locally designed precision weapons.[23]

POTENTIAL FUTURE CONTINGENCIES

In the near future the Chinese predict that they will possess some very impressive RMA technologies to defend their national interests. As China advances as an economic and military power, U.S. operational planners may encounter Chinese threats similar to the following future contingencies:

- A prosperous China with a modernized navy expanding from its current coastal naval presence to an enlarged maritime area of operations encompassing Taiwan and the Ryukyu Islands and as far distant as the Bonin, Volcano, Guam, and Mariana Islands;

- Isolating, attacking, and then forcibly annexing Taiwan;

- Enforcing its claim to the entire South China Sea, especially if large quantities of fossil fuels and critical minerals are discovered in the Spratly Island Archipelago;

- Responding to a trade retaliation or similar crisis with Japan or Korea that leads to military action such as naval blockades, quarantines, or mining of straits and harbors;

- Attacking U.S. or allied forces, equipment, and information nodes with computer viruses, lasers, robotics, or electro-magnetic weapons.

MODERNIZATION EFFORTS AND FUTURE RMA WEAPONRY

China, even with a comparatively smaller force, could capitalize on her force modernization and the RMA by employing the following sophisticated technologies to keep or raise the cost of America intervening militarily in any of the aforementioned scenarios.

a. Air Forces. In the past China has relied heavily on her capability to develop reverse-engineered aircraft. With the exception of the newest F-10 fighter under development, these aircraft are clones of Russian originals. These aircraft are considered to be of inferior

quality, even when outfitted with western technology.[24] Recently, China has shown a committed interest in acquiring billions of dollars worth of sophisticated top-of-the-line military aircraft and air-to-air missiles, especially from Russia. Recent reported or speculated purchases of Su-27 fighters, Mach-3 MIG-31 high altitude interceptors, and Tu-22M long-range bombers are well suited to projecting combat power.[25] Additionally, China has acquired inflight refueling technology, most likely from Iran and Israel, which has caused concern among the neighboring South China Sea countries as they fear China's ability to project power in this contested region.[26]

The Chinese are impressed with the development and the employment doctrines of the U.S. Air Force. They recognize the utility of increased stealth, night vision devices, and long-range attack capabilities. The Chinese acknowledge the technical advantages of automated command and control, electromagnetic warfare, and the increased destructive power of precision guided munitions.[27] Inevitably, the Chinese feel that the RMA will strengthen the development of a technologically superior air force. As future information warfare relies more and more on air and space superiority, the Chinese Air Force, according to the RMA proponents, will transition from an independent strategic force to a conventional campaign force that supports all services.[28] Furthermore, the key Chinese resemblance to U.S. Air Force strategy, and most importantly future warfare, is China's acknowledgment that air and space forces must be interoperable. Using the logic that "one who controls outer space, controls the earth" Chinese RMA advocates visualize the requirement for both air and space dominance to support future combat operations.[29]

b. Naval forces. Perhaps China's greatest military capability in the next decade will be her ability to deny the U.S. of localized sea control. Although China will probably not have a blue water fleet to project global naval power for the next 20 years, she is significantly

increasing her capabilities for power projection within the Asian-Pacific coastal waters. China is modernizing her naval force with new classes of frigates and destroyers that are outfitted with power plants, missiles, and avionics supplied by the U.S. and other western countries.[30] These ships are hermetically sealed for nuclear, chemical, and biological defense.[31]

One of the better means for China to impose sea denial is by mining key straits, littoral waters, and shipping lanes. Mines are easily deployed and in recent years have been responsible for the loss or damage of more U.S. Navy ships than all other weapons combined.[32] To assist in sea denial operations, most of China's surface ships and submarines are equipped with mine rails and are capable of laying mines as a secondary mission.[33] China is also actively developing and acquiring new mine technology such as the rocket propelled EM52 mine that lurks near the bottom, detaches from its mooring and rises vertically to attack ships and submarines. Future mine warfare will consist of microprocessor-controlled magnetic, acoustic, radio detonation, and stand-off capabilities with anti-sweeping and recovery devices to make them hard to detect.[34]

Another excellent naval platform for denying sea-access that the Chinese are modernizing is the submarine. China's Han-class of nuclear attack submarines, although not as quiet as American boats, still have a long-range interdiction capability. To test this new capability, in 1994 a Han-class submarine tailed and closed to within 20 miles the USS Kitty Hawk, which at the time was unprecedented. Most troubling, though, is China's purchase of Russian Kilo-class and production of indigenous produced Song-class diesel-electric submarines.[35] These submarines have a low acoustic signature and are ideal for inserting special operations troops, covert mining, and merchant blockage missions in the shallow littoral waters off Taiwan and the Spratly Islands.[36] China can be expected to improve their submerged-launched antiship cruise missiles, while buying Russian hard-to-detect wake-homing and wire guided acoustic-homing

torpedoes.[37] Finally, with only one antiquated ballistic missile submarine (SSBN), China has announced a long term goal of developing a survivable naval nuclear retaliatory force. The next generation TYPE 094 SSBN submarine will be capable of carrying 16 JL-2 ballistic missiles with a range of 4000 miles. This capability will allow the Chinese to target portions of the United States from Chinese coastal waters.[38] Along with China's current land-based strategic nuclear forces these capabilities are an off-setting consideration for U.S. operational commanders during any conventional, regional contingency with China.

c. Ground forces. China's ground forces have not been modernized as quickly as the naval and air forces and currently are not as pertinent to U. S. planners. Down from an army of 4.7 million in 1981 to 2.8 million today, the Chinese envision even a smaller, but better equipped and trained military force.[39] Much of the PLA's major combat equipment is dated, however, there are some highly trained, well-equipped, mobile forces called "fist" divisions, as well as airborne forces that are designed as rapid reaction forces for either internal or external threats.[40] This selective modernization of forces is analogous to World War II Germany equipping "high tech" Panzer tank and mechanized divisions, while many Wehrmacht infantry units still depended heavily on horses for their mobility.[41] China, similar to Germany in the 1930's, is allocating its limited resourses where it can get the most "bang for the buck." Chinese RMA supporters see future land battles as being multidimensional and multidirectional. Recognizing that the front will not be fixed, they envision that all directions (traditional front, rear, and flanks) will be simultaneously attacked in depth. Additionally, all dimensions will be full of intense combat while operational activities will consist of integrated combined arms engagements during continuous, all-weather conditions.[42]

d. Ballistic and Tactical Missiles. China continues to modernize its ballistic nuclear rocket forces with improved mobility, survivability, accuracy, and reliability. New solid fuel ICBMs have ranges in excess of 6,000 miles and provide a viable deterrent against other nuclear forces.[43] Of particular concern is China's rapid development of conventional ballistic and cruise missile technology. This ability is evidenced by China's recent attempt to intimidate Taipei by launching DF-15's that landed as close as 25 miles from Taiwan.[44] With continued improved targeting and command and control networks, a large Chinese missile fleet could overwhelm and saturate an Aegis-class cruiser's theater missile defense (TMD) system,[45] thus denying American access to influence a regional Asian crisis.

e. Information Warfare. Chinese RMA advocates realize the critical value of information superiority in future conflicts. They see the battlespace being monitored by a variety of sensors and intelligence platforms. Collected and processed information would be digitized for sending and receiving orders, exchanging intelligence, and integrating combined arms operations, thus improving the overall situational awareness of the commander.[46] Some RMA supporters consider the most important information weapon systems are those that will give them the capability for a clandestine, over-the-horizon, high precision, and sudden attack that shocks and terrifies the enemy, forcing him to break off the attack.[47] The Chinese see war rapidly changing due to a reliance on information. Battles will be quickly fought and the lines between strategic, operational, and tactical levels of war will be blurred as smart weapons meet objectives without losing large units. Furthermore, objectives pursued by both belligerents will be limited political aims instead of total surrender.[48] As a consequence to information warfare, the Chinese see the employment of viruses and nanotechnology to disrupt, paralyze, and destroy vital communication nodes and high-tech weaponry and equipment.[49] These counter-information

warfare systems would be used to "level the playing field" of two adversaries of different capabilities and strengths.

SINO PIPE DREAM OR FUTURE THREAT TO U.S. FORCES?

A closer and realistic look at China's RMA and modernization roadmap for the future, compared to her current deficiencies in military, industrial, and technical capabilities, reveal critical operational gaps that can be exploited by U.S. planners. For example, the excessively large, conscripted Peoples' Liberation Army (PLA) is mostly equipped with relatively older generation tanks, artillery, and similar equipment. Although a threat to neighboring countries, China's attempt to modernize and standardize such a large army will take considerable time, effort, and resources. Furthermore, for many years the PLA, both from an institutional standpoint to the small unit level, has been actively involved in successful commercial interests for profit that, arguably, has degraded combat training and readiness.[50]

The Chinese Navy has fared better than the other services in her modernization and RMA efforts, but she will still lack a threatening power projection capability in the near future. Although anti-submarine warfare (ASW) has greatly improved with recent acquisitions of French sonar and Italian torpedoes, the vast majority of Chinese destroyers and frigates have only depth charges for defense while many older submarines are poorly equipped to engage modern ASW platforms and submarines.[51] China has only a land-based naval air capability since she does not possess any aircraft carriers. Although rumored for years to be looking to buy such a ship from Russia or France, analysts predict China will not produce an indigenously built carrier until at least 2010.[52] Once China has an aircraft carrier it will be years before carrier-based aircraft, support and protection ships, and port infrastructure required to sustain a carrier

battle group is in place. Even of a more critical deficiency is that it may take years of training and establishing procedures and doctrine before Chinese pilots have the degree of proficiency necessary for sustained overwater projection.[53] Furthermore, China's amphibious capabilities, consisting of only one brigade of marines and antiquated landing craft, are considered questionable whether they are a threat to regional stability.

The Chinese Air Force has focused its modernization program on purchasing or producing 4th generation fighter and attack aircraft, an integrated air defense, and an improved command and control structure. However, when put in aggregate terms, only about 100 of her 3700 fighter aircraft are of the Su-27/MIG-31 variety. Most of China's other combat aircraft date back to the MIG-15/17/19 series built during the 1950's and 1960's With reported critical maintenance and logistic problems, vintage aircraft, and pilots getting only about 80 flight hours a year, there is a tendency to overstate the combat effectiveness and technical capability of the Chinese Air Force.[54]

A RMA involves completely rethinking joint force doctrine and combined arms integration in which precision weapons and enabling technologies will dominate. The Chinese are weak in both areas since they lack the planning and application knowledge; integrated logistical support system; and the command, control, communication and intelligence infrastructure necessary to sustain joint and combined arms operations.[55] To acerbate their deficiencies in the integration of aircraft and combat systems, the Chinese are inhibited by problems with advanced software development required for sophisicated large computer systems and networks.[56] Furthermore, China in the next 5-10 years will continue to suffer from economic and social-cultural constraints that will limit its ability to achieve its broad visions.[57] The political/economic relationship of action-reaction in a democratic free-market economy is too

diverse to co-exist within an autarchic society like China's. Therefore, as market economies principles spread throughout China it is a near certainty that democratic reforms will follow, mostly likely after considerable transitional eruption. However, economic, social, and military deficiencies aside, China will eventually be, at a minimum, an Asian-Pacific regional power during the first half of the 21st century.[58]

OPERATIONAL PLANNING CONSIDERATIONS AND RECOMMENDATIONS

So what are the U.S. operational planning implications to the Chinese RMA and modernization programs as compared to their known deficiencies? It means that China, though currently generations behind the West in weaponry and employment capabilities, is beginning to take a serious look into her future security needs. Lieutenant General Rokke, former President of the National Defense University, keenly summarized the issue when he remarked, "Western specialists may be surprised to learn how far Chinese strategic thinking has advanced beyond the fundamental concepts of Sun Zsu and Chairman Mao."[59]

Though China's RMA plans are possibly decades from being completed, her innovative, asymmetric thinking about future warfare is a key planning consideration that should not be underestimated, ignored, or lightly dismissed. Chinese RMA supporters realize the intrinsic value that new operational concepts such as superior battlespace information systems and space-based weapons will have on 21st century combat operations. Another planning consideration is America's unknown ability to influence events ashore or shape the security environment, especially if hindered from commanding the sea and airspace. Chief of Naval Operations Admiral Jay Johnson makes the point that access denial is a multi-service concern when he stated, "This is more than a sea-denial threat or a Navy problem: it is an area-denial threat whose

defeat or negation will become the ***single*** (my emphasis) most crucial element in projecting and sustaining U.S. military power where it is needed."[60] Proliferating weapon technologies might allow China to attack air forces, ports, airfields, troop concentrations, and logistics ashore asymmetrically from great distances. Naval forces would be especially vulnerable to Chinese long-range ballistic and stealthy cruise missiles, mined avenues of approach, and diesel and nuclear-powered submarines employed to interdict war and merchant ships. Finally, combined with America's well-known aversion to taking casualties, a Chinese version of RMA with an unorthodox approach to warfare and area access denial is both logical and sound.

Consequently, with U.S. strategic and operational planning guidance directed toward a relative near-term threat, USCINCPAC operational planners must anticipate and plan how China might circumvent her existing military deficiencies and rapidly adapt and exploit RMA technologies. The following planning recommendations are offered:

- Establish a long-range RMA planning cell that would be a separate section within the J-5 future planning division. This cell would consist of civilian and military operations, intelligence, logistics, and technical experts who would focus primarily on identifying Chinese RMA technologies, and then developing operational plans, concepts, and countermeasures to defeat possible asymmetrical threats. This cell would be responsible for monitoring Western and Russian technology transfers to China that may eventually be employed in advanced weaponry, as well as Chinese transfers of high-tech equipment and weapons to other countries.

- Conduct joint exercises to evaluate and improve new operational concepts to defeat asymmetrical and area denial threats.

- Continue to be an advocate for acquisition, integration, and employment of high-tech weapons, surveillance and targeting capabilities, and nanotechnology by giving these future force multipliers a high priority on the CINC's Integrated Priority List.

- Increase forward presence and American commitment in Asia by more frequent military contacts, exchanges, and port calls. Stability requires America to show the flag.

- Develop better interoperability with allied Asian forces by conducting more frequent combined exercises such as ASW, maritime intercept, air interdiction, and ship steaming operations. These types of exercises would identify, enhance, and evaluate operational warfighting capabilities between the U.S. and her regional allies.

- Promote frequent U.S. contacts with Chinese military officials. Arguably, developing personal relationships between senior American and Chinese military officers are the cheapest and most effective ways to encourage trust and greater Chinese transparency. China should also be invited to observe and partake in training that involve common issues such as anti-piracy, drug and weapon smuggling interdiction, humanitarian assistance, polution control, and search and rescue operations. Increased U.S.-Chinese military contacts would go a long way to portray true operational intent and enhance mutual respect among military professionals.

CONCLUSION

China's explosive economy has financed her recent military modernization program. Not only is China modernizing her armed forces but many of her senior military authors are advocating a RMA and expounding on its potential value to future warfare. Even though China's military modernization has increased her force projection capabilities, she is far from being a major threat to the United States in the near future. Nevertheless, to maintain America's

competitive edge, U.S. operational planners must anticipate and plan for the Chinese RMA and its potential asymmetric concepts to deny area access to U.S. forces. The U.S. should not be naive about Chinese capabilities nor should they be exaggerated. The question remains, however, what pace, orientation, and ultimate use will the Chinese version of the Revolution in Military Affairs take?[61]

ENDNOTES

[1]Edward B. Atkeson, The People's Republic of China in Transition: An Assessment of the People's Liberation Army, The Land Warfare Papers, no. 29 (Arlington, VA: Association of the United States Army, 1998) 5.
[2]Peter Lewis Young, "The Potential For Conflict in the South China Sea," Asian Defense Journal, November 1995, 18-27.
[3]Ulysses O. Zalamea, "Eagles and Deagons at Sea - The Inevitable Strategic Collision Between the United States and China," Naval War College Review, Autumn 1996, 62-63.
[4] Jim Bussert, "The Chinese Navy - A Pacific Wild Card," Defense Electronics, July 1992, 48-53.
[5]Michael G. Gallagher, "China's Illusory Threat to the South China Sea," ,International Security, Vol. 19, No. 1, Summer 1994, 180.
[6]Michael Pillsbury, China and the Revolution in Military Affairs, (Washington, D.C.: National Defense University Press, 1997), 3-4.
[7]Ibid., 4-9.
[8]Alexander Chieh-cheng Huang, "The Chinese Navy's Offshore Active Defense Strategy - Conceptualization and Implications," Naval War College Review, Summer 1994, 11-15.
[9]Pillsbury, 5.
[10]June Teufel Dreyer, "China's Strategic View: The Role of the Peoples's Liberation Army," (Carlisle, PA: Strategic Studies Institute, 1996), 7.
[11] Pillsbury, 5-6.
[12]Fang Ning, "Defense Policy in the New Era," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 53-54.
[13]Huang, 14.
[14]Fang Ning, 53-54.
[15]Pillsbury, 8.
[16]Huang, 15.
[17]Pillsbury, 6.
[18]Ibid., 11.
[19]Ibid., 14.
[20] John Rquilla and Solomon M. Karmel, "Welcome to the Revolution...in Chinese Military Affairs," Defense Analysis, Vol 13, No.3, Winter-Spring 1998, 256.
[21]Wu Guoqing, "Future Trends of Modern Operations," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 348-349.
[22]Pillsbury, 6-7.
[23]Paul Dibb, "The Revolution in Military Affairs and Asian Security," Survival, Vol. 39, No. 4, Winter 1997-1998, 107.
[24]Julia A. Ackerman and Michael Collins Dunn, "Chinese Airpower Revs Up," Air Force Magazine, July 1993, 58.
[25]Gallagher, 175.
[26]Acherman and Dunn, 59.
[27]Zheng Shenxia and Zhang Changzhi, "The Military Revolution in Air Power," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 300.
[28]Ibid., 306.
[29]Ibid., 308-309.
[30]Ngok Lee, "Chinese Maritime Power: Toward Moderisation," Naval Forces, Vol II, No.2, 1990, 89.
[31]You Ji, "The Chinese Navy and Regional Security," Asian Defence Journal, September 1995, 12.
[32]Department of the Navy, Office of Naval Intelligence, "Challenges to Naval Expeditionary Warfare," 1997, 6.
[33]Congress, House, House National Security Committee, Selected Military Capabilities of the People's Republic of China, 7.
[34]Department of the Navy, Office of Naval Intelligence, "Challenges to Naval Expeditionary Warfare," 8.
[35]James C. Bussert, "Chinese Submarines Quietly Amass Strength in Pacific," Signal, June 1995, 75.
[36]Department of the Navy, Office of Naval Intelligence, "Worldwide Submarine Challenges," 1997, 19-20.
[37]Ibid., 20-21.

[38]Ibid., 22.
[39]Atkeson, 7.
[40]Ibid., 8.
[41] John Ellis, Brute Force: Allied Strategy and Tactics in the Second World War, (New York: Viking Penguin, 1990, 45.
[42]Xiao Jingmin and Bao Bin, "21st Century Land Operations," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 312-315.
[43]Congress, House, House National Security Committee, Selected Military Capabilities of the People's Republic of China, 1 and 4.
[44]Atkeson, 12.
[45]Congress, House, House National Security Committee, "Selected Military Capabilities of the People's Republic of China, Press Release of Rep Floyd D. Spence, Chairman, "China: U.S. Obstacle to Superpower Status," April 8, 1997, 2.
[46]Xiao Jingmin and Bao Bin, 314-316.
[47]Wang Fufeng, "The Challenge of Information Warfare", in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 321.
[48]Wang Baocun and Li Fei, "Information Warfare", in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 337-338.
[49]Sun Bailin, "Nanotechnology Weapons on Future Battlefield," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), 415-416.
[50] Clare Hollingworth, "Many Fears for the Future," Asia-Defence Reporter, Maay-June 1995, 15.
[51]John Caldwell, "China's Conventional Military Capabilities, 1994-2004," (Washington, D. C.: The Center for Strategic & International Studies, 1994), 9.
[52]Department of the Navy, Office of Naval Intelligence, "Worldwide Challenges to Naval Strike Warfare," 16.
[53]Caldwell, 9-10.
[54]Dreyer, 9-10.
[55]Dibb, 100.
[56] Ibid., 103.
[57] Arquilla and Karmel, 264.
[58]Congress, House, House National Security Committee, Selected Military Capabilities of the People's Republic of China, Staff Report (Washington: U.S.Govt. Print. Off., 1997), 1.
[59]Ervin J. Rokke, "Foreword," in Chinese Views of Future Warfare ed. Michael Pillsbury (Washington, D.C.: National Defense University Press, 1997), xv.
[60]Jay Johnson, "Anytime, Anywhere. A Navy for the 21st Century," Proceedings, November 1997, 49.
[61]"Maturing Chinese Capabilities May Presage Larger World Role," National Defense, January 1996, 25.

BIBLIOGRAPHY

Ackerman, Julia A. and Michael Collins Dunn. "Chinese Airpower Revs Up," Air Force Magazine, July 1993, 56-59.

Arquilla, John and Solomon M. Karmel. Welcome to the Revolution...in Chinese Military Affairs," Defense Analysis, Vol.13, No. 1, 1997, 255-270.

Atkeson, Edward B. The People's Republic of China in Transition: An Assessment of the People's Liberation Army, The Land Warfare Papers, no. 29 Arlington, VA: Association of the United States Army, 1998.

Bussert, Jim. "The Chinese Navy - A Pacific Wild Card," Defense Electronic, July 1992, 48-53.

_____. "Chinese Submarines Quietly Amass Strength in Pacific," Signal, June 1995, 75-77.

Caldwell, John. "China's Conventional Military Capabilities, 1994-2004," Washington, DC: The Center for Strategic & International Studies, 1994.

Chinese Views of Future Warfare ed. Michael Pillsbury Washington, DC: National Defense University Press, 1997.

Congress, House, House National Security Committee, Selected Military Capabilities of the People's Republic of China, Press Release of Rep Floyd D. Spence, Chairman, April 8, 1997, 1-2.

Congress, House, House National Security Committee, Selected Military Capabilities of the People's Republic of China, Staff Report, Washington, DC: U.S.Govt. Print. Off., 1997, 1-9.

Dibb, Paul. "The Revolution in Military Affairs and Asian Security," Survival, Vol. 39, No. 4, Winter 1997-1998, 93-116.

Department of the Navy, Office of Naval Intelligence, "Worldwide Challenges to Naval Strike Warfare," 1997.

Department of the Navy, Office of Naval Intelligence, "Challenges to Naval Expeditionary Warfare," 1997.

Department of the Navy, Office of Naval Intelligence, "Worldwide Submarine Challenges," 1997.

Dreyer, June Teufel Dreyer. China's Strategic View: The Role of the Peoples's Liberation Army, Carlisle, PA: Strategic Studies Institute, 1996.

Ellis, John. Brute Force: Allied Strategy and Tactics in the Second World War, New York: Viking Penguin, 1990.

Gallagher, Michael G. "China's Illusory Threat to the South China Sea," International Security, Summer 1994, Vol. 19, No. 1, 169-194.

Huang, Alexander Chieh-cheng. "The Chinese Navy's Offshore Active Defense Strategy - Conceptualization and Implications," Naval War College Review, Summer 1994, 7-32.

Hollingworth, Clare. "Many Fears for the Future," Asia-Defence Reporter, May-June 1995, 15-16.

Ji, You. "The Chinese Navy and Regional Security," Asian Defence Journal, September 1995, 12-13.

Johnson, Jay. "Anytime, Anywhere. A Navy for the 21st Century," Proceedings, November 1997, 48-50.

Lee, Ngok. "Chinese Maritime Power: Toward Moderisation," Naval Forces, Vol II, No.2, 1990, 89-95.

"Maturing Chinese Capabilities May Presage Larger World Role," National Defense, January 1996, 24-25.

Pillsbury, Michael. China and the Revolution in Military Affairs, Washington, DC: National Defense University Press, 1997.

Smith, Edward A., Jr. "The Navy RMA War Game Series, April 1995-November 1996, Naval War College Review, Autumn 1997, 17-31.

Young, Peter Lewis. "The Potential For Conflict in the South China Sea," Asian Defense Journal, November 1995, 18-27.

United States Pacific Command, USPACOM Home Page, <http://www. pacom.mil/about/vmc.htm.

Zalamea, Ulysses O. "Eagles and Deagons at Sea - The Inevitable Strategic Collision Between the United States and China," Naval War College Review, Autumn 1996, 62-74.